

Appl. No. 10/007,331
Amdt. dated August 19, 2005
Reply to Office Action of April 21, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-56 (Cancelled)

57. (Currently amended) A commercial-scale method for *in vitro* sialylation of terminal galactose residues on a glycoprotein, said method comprising contacting said glycoprotein with a reaction mixture that comprises a sialyltransferase, a sialic acid donor moiety, and other reactants required for sialyltransferase activity, for a sufficient time and under appropriate conditions to transfer sialic acid from said sialic acid donor moiety to said terminal galactose residues, wherein the sialyltransferase is recombinantly produced, and wherein at least 80% of the terminal galactose residues present on the glycoprotein are sialylated.

58. (Cancelled)

59. (Previously presented) The method of claim 57, wherein a greater percentage of terminal galactose residues are sialylated compared to an unaltered glycoprotein.

60. (Cancelled)

61. (Previously presented) The method of claim 57, wherein at least 90% of the terminal galactose residues present on the glycoprotein are sialylated.

62. (Previously presented) The method of claim 57, wherein the terminal galactose residues comprise one or more saccharides selected from the group consisting of

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Gal β 1,4GlcNAc, Gal β 1,4GalNAc, Gal β 1,3GalNAc, Gal β 1,3GlcNAc, Gal β 1,3Ara,
Gal β 1,6GlcNAc, and Gal β 1,4Glc.

63. (Previously presented) The method of claim 62, wherein the terminal galactose residues comprise Gal β 1,4GlcNAc or Gal β 1,3GlcNAc.

64. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Gal β 1,4GlcNAc residues present on the glycoprotein are sialylated.

65. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Gal β 1,3GlcNAc residues present on the glycoprotein are sialylated.

66. (Cancelled)

67. (Previously presented) The method of claim 57, wherein the terminal galactose residues are present on an N-linked oligosaccharide.

68. (Previously presented) The method of claim 57, wherein the sialyltransferase includes a sialyl motif which has an amino acid sequence that is at least about 40% identical to SEQ ID NO: 1.

69. (Previously presented) The method of claim 68, wherein the sialyltransferase is an ST3Gal III.

70. (Previously presented) The method of claim 69, wherein the sialyltransferase is a rat ST3Gal III.

71-100 (Cancelled)

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101. (Previously presented) The method of claim 57, wherein the glycoprotein comprises an immunoglobulin.

102-111 (Cancelled)

112. (Cancelled)

113. (New) The method of claim 57, wherein the sialyltransferase is expressed in an *Aspergillus niger* cell.